

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts.
Xenophon.

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. III.

RICHMOND, APRIL, 1843.

No. 4.

JERUSALEM ARTICHOKE—(*Helianthus Tuberosus*.)

We know several judicious farmers that place a very high estimate upon this neglected vegetable. We observe that M. Boussingault, of France, by actual analysis, has arrived at the conclusion, that in consequence of its powers of extracting carbon and nitrogen from the air, the Jerusalem artichoke is entitled to all the attention that it is now commanding in the best cultivated parts of France. We, therefore, extract the following directions for its cultivation from that excellent paper, the "Nashville Agriculturist":

"From the fact, that many inquiries have been made of late in relation to this very remarkable and useful plant, I am disposed to speak a few things of its culture and uses.—The Jerusalem artichoke is a native of the warmer parts of America, and of course was unknown in Europe till after the discoveries in this country by Columbus and his coadjutors. Since that time it has been cultivated to considerable extent on the continent as well as in Great Britain, but the reports of its profits have considerably varied, in that, as well as this country. In the old world some have cultivated it to afford shade to the game; others have converted the stocks and leaves into fodder for cattle, and others again, have encouraged its growth for the tubers alone. In this country there are two important objects to be kept in mind in raising artichokes; 1st. The improvement of land; 2dly. The use of the tubers. However, the first matter is the cultivation, and I begin with

"1. *Soil*.—Almost any kind of land will produce artichokes, and it is remarkable, that they will grow in the shade, that is, under trees, or in fence corners very well indeed. Land, however, with a tolerably good sandy mould will give the most abundant crop. Low, wet soils, and very tenacious clay are not so suitable.

"2. *Preparation of Land*.—The ground should be broken as for corn, that is to say, one good, deep ploughing, and a thorough harrowing will answer the purpose admirably.

"3. *Laying Out*.—Rows laid off four feet each way with a bull's tongue or shovel plough, in most soils, will be the proper distance.

"4. *Quantity of Seed*.—From four to five

bushels will be required to the acre, and unless the long roots are broken to pieces of three or four joints, or eyes each, this quantity will not be enough.

"5. *Manner of Planting*.—Drop one root at each cross of the plough and cover from one to two or three inches with a harrow, hoe, or plough.

"6. *Cultivation*.—So soon as the young plants appear, run round them, with a cultivator, harrow or light plough to destroy the young weeds, and loosen the earth. Keep the ground free of weeds and open to the influence of the atmosphere, till the plants are about three feet high, when they should be laid by, by the use of a cultivator; or in the absence of a cultivator, and when the land has been ploughed, the harrow should pass both ways to leave the ground loose and the surface level. Generally, about the same cultivation given to corn will answer well for artichokes.

"7. *Digging*.—This is the most troublesome job in the management of this crop; and if the hoe is the dependance, the labor will be very tedious. The better plan, is to lay off a land as for breaking up the ground, so soon as the frost has killed the under leaves of the stocks. The plough should run from six to nine inches deep and let the hands, big and little, pass directly after the plough, to pick up, that none of the roots may be covered by the next furrow.

"8. *Yield*.—The produce to the acre is variously estimated from five hundred to one thousand bushels, and it is probable the turn out on medium land would be nearer the latter than the former.

"9. *Uses*.—In England and other parts of Europe, the tubers have been considered quite a delicacy for man, and without doubt they make the most beautiful pickle. But their chief importance, in this respect, is their use in feeding hogs. From the middle of October to the middle of November, the hogs may be turned on the artichokes, and with salt always in troughs to which they can have access, they will grow and thrive till next spring, particularly, if the ground is not too hard for rooting. I have not experimented to ascertain the quantity of hogs to the acre of good artichokes; but from the observation of two seasons, I am of the opinion twenty head will do well on an acre for months. As some have complained their hogs would not root after them, it may be necessary, as hogs,

like men, know not much before learning, that they be taught to root after them. This is done, by calling the hogs after a plough that will throw out the roots, till the grunTERS learn their habitation, which will require but a very short time.

"10. *Improvement of Land.*—As the stocks grow from ten to fifteen feet in height, and have thick, porous foliage, much of the food of the plant is received from the atmosphere, and thereby the soil is not so heavily taxed as by other crops, the ground is protected from the killing rays of the sun and the stocks and leaves fall and rot very soon,—these advantages, with the manure from hogs, afford the cheapest, and amongst the richest coats in my knowledge.—It is my conviction, (in the absence of long experience) that artichokes in summer, and hogs in winter, will enrich our poor lands cheaper and much better than upon any other plan. To be sure, a farmer cannot have all his land in artichokes, but every one should have enough to support his hogs through the winter, and I venture those who give this crop a fair trial, will reluctantly abandon it.

"11. *General Remarks.*—A few farmers of my acquaintance have informed me, that they have succeeded with corn and artichokes together, and it is highly probable this will prove a successful mode of cultivating these two crops; but on the system of 'one thing at a time,' we would prefer each crop separately. Some have supposed the second year's growth on the same ground would be more valuable than the first; but this is a mistake. The plants grow so thick the second year, that not more than half a crop can be anticipated. It might answer, to plough out rows and cultivate the second year; but the practice of putting artichoke lands in something else the second year, is the plan I much prefer.

"Amongst the arguments which might be used in favor of this crop, it should not be forgotten, that there is no labor of digging, but for seed; that more troublesome weeds and grasses are completely smothered out; and last, but not least, the young plants the second year are more easily subdued than almost any weeds known. Take artichokes all in all, I think them worthy the attention of every farmer who wishes to enrich his lands, or raise his pork with a small outlay of grain.

T. F."

For the Southern Planter.

CHARCOAL.

After two days close attention to my coal kilns, I sit down now at night to make a record. I have already burned six kilns, now have two on fire, and wood on hand for another. My kilns are made about sixteen feet at the base, and nine feet high; which with the fillings in the heart as it sinks, contains about ten cords of

wood. This ten cords will make about five hundred bushels of coal, dust and all—costing three days labor with four hands. But have you ever considered that the coal is not all the profit? Two or three kilns should be burned on the same ground, by which time the covering earth will be completely saturated with potash and other salts and gases; thus, as I conceive, making it equal in value to the coal. It will take about one thousand bushels of earth to cover a kiln of the above dimensions, to which add one thousand bushels of coal, the produce of two burnings, and we have two thousand bushels of rich manure. After trying the trough and pestle for pulverizing the coal, I have abandoned them, and now tramp and beat the coal about the kiln—the first time returning it as covering, and the last time carting off to the land, or the stock yards. For a third or after burning on the same ground, the coal should be removed, otherwise the covering will be too porous. Thus it will be seen that a few days hence, I will have made four thousand five hundred bushels of pure coal, or nine thousand bushels of rich black compost—and I shall never miss the labor thus employed.

As we are informed that the proper place for coal is on clay grounds, and that one of the objects is to create porosity, I am inclined to think that an inch square and less is sufficiently fine. I have cast about eight hundred bushels over three acres of wheat, which, with dressing of meadows, will, I think prove to be the most profitable mode of using it.

ZA. DRUMMOND.

February 17, 1843.

BLUE GRASS.

Until we are satisfied that there is something in our climate, or an irremedial defect in our soil, to prevent the growth of the Kentucky blue grass, we shall not fail to press its cultivation upon the attention of our readers. We believe it to afford the best grazing in the world, and we are satisfied that the greatest defect in our farming system consists in too much *tillage* and too little *pasturage*. We have an abiding faith in the wonder-working improvement that would flow from the introduction of this valuable grass, not less valuable for its fertilizing than its grazing properties. We entertain too the most lively hopes, that whenever the experiment is fairly tried, our rich river lands, with an application of lime where required, will prove admirably adapted to its growth. We, therefore, copy from a Western paper the following article upon the subject:

"After the imagination is completely exhausted

in eulogizing the various products of mother earth, there is nothing to be compared to the old-fashioned blue grass for permanent pasture. It is not denied there are other grasses very valuable; but blue grass comes forward early in the spring, will bear moderate grazing through the summer, and when not too closely cropped, will keep neat stock, such as young cattle, colts and sheep, in good condition all the winter.—This cannot be predicated of any other grass; and as this is a favorable time, something in relation to its management may be beneficial.

"1. *Soil*.—Almost any land with a moderate quantity of vegetable mould will grow it most luxuriantly; but experience has taught, that the richest limestone soil gives by far the best crop. Old fields very much worn will answer, if the farmer can have patience till the tender plant gets properly rooted. Indeed, land fully exposed to the sun is best for every kind of pasture, if the full set can be obtained. Stock will not go into the tallest grass in the shade, while a morsel can be procured in the sunshine. However, very good blue grass pasture can be obtained in woodland, if the timber does not entirely shade the ground, and the farmer will find it to his advantage to cut out the under growth to let his grass have a little sun. Light, sandy and stiff clay soils will not answer for blue grass, and we may be sure remarkably poor land will not do.

"2. *Preparation of Land*.—If it is desired to sow in woodland, the logs, brush, leaves and trash should be taken off. After it is clean, harrow the land thoroughly, and sow immediately. This is the best plan for blue grass on any kind of land.

"3. *Quantity of Seed*.—A bushel or ten pounds of well stripped seed is the usual allowance, but if a bushel and a half can be spared, the stand will be sooner and much thicker. A gallon of clean seed will do as well as a bushel in the chaff. Care should be taken that the seeds are good. Notice that the straw was not cut when too green, or that the seed appear not black and smell musty. The chaff should appear yellow and smell sweet. The eye and nose, will soon tell good from bad seed. Seed properly gathered and preserved, will not be injured for years, but if they have ever been wet, or the least heated, the probability is, that they will not vegetate.—As a general rule, the fresher the seed the better.

"4. *Time of Sowing*.—January and February are the best months for sowing; but March, September and October will do pretty well.—Many experienced farmers prefer sowing while the snow is on the ground. In this way, most of the seeds come in contact with the earth, as the snow melts away, and the stand is apt to be good.

"5. *After Management*.—When the grass first comes up, the blades are remarkably small,

and not unfrequently the strong weeds seem to have choked it out; but be not alarmed, the grass is only waiting to send down its roots to get better hold, and by and by, it will conquer every intruder. Some pasture lightly the first year, but we prefer nothing should touch the land, till the second year, or immediately after the seeds ripen. Then, pasture but lightly.—The third year is as soon as a full and vigorous stand can be anticipated. Care should then be taken to tread the surface close with heavy stock, and the grass will be rich and strong in proportion to the density of the sod on which it grows. The more you pack it, other things being equal, the stronger it will rise.

T. F."

LICE ON CATTLE.

A correspondent of the *Maine Farmer* says: "Lice on cattle at this season of the year, are on the butt end of the horns. Destroy them now, and you will not have it to do in the winter or spring. Strong tobacco juice or alcohol will destroy them."

Spirits of turpentine, rubbed on at the roots of the horns, will also destroy them—and if a teaspoonful of it be put in the *cup* formed just back of the horns, twice or thrice between this and the spring, it will prevent the occurrence of hollow horn.

A strong brine made of salt and water will destroy lice, and it may be said to be the safest application that can be made.—*Ed. Am. Farmer*.

For the Southern Planter.

DOUBLE EARED CORN.

Messrs. Editors,—In the No. of the 'Planter' for March, 1842, your correspondent, Mr. Drummond, asks, "what advantage can there be in cultivating double eared corn?" To satisfy the doubts of myself and others, I was induced in the autumn of 1839 to compare the produce of stalks bearing single and double ears, selecting the best of each kind, and, from memoranda made at the time, I will give you the results, so far as they were ascertained.

On the 11th of November, I weighed *eight* ears taken from four stalks, which weighed 4 lbs. 1 ounce, whilst *four* ears from four stalks weighed 3 lbs. 9 oz.—difference 1 lb. 1 oz. in favor of the double eared corn. On the 12th, I weighed *twelve* ears from six stalks and *six* ears from six stalks—the whole weight not noted, but the difference is stated as 2 lbs. 4 oz. in favor of the double eared corn—the greatest weight from one stalk bearing two ears, was 1 lb. 10 oz., the greatest weight from one stalk bearing a single ear, was 1 lb. 1½ oz. On the 15th, I weighed the produce of three stalks bearing two ears each: the first weighed 1 lb. 10½ oz.—the

second, 1 lb. 11 oz., and the third, 1 lb. 12 oz., whilst the largest single ear weighed only 1 lb. 6 oz.

I have given the above in hopes that it may induce others to turn their attention to the subject, and report the result of their observation, in the Planter. As I have been for several years selecting my seed corn from stalks bearing two or more ears, I think it not improbable that the general size of my corn may be somewhat diminished.

The actual weights are given above: the double ears were invariably gathered from the single stalk, and in every case the largest ears were selected from the corn crib as the representatives of the single ears: it is possible that even they may have grown upon stalks bearing double ears.

Your obedient servant,

JOHN HART.

Louisa, March, 1843.

CUTTING WHEAT.

In the last volume of the Planter we gave the results of some experiments made by Mr. "Hannam," of England, to ascertain the state in which wheat can be cut to the greatest advantage. These experiments excited great interest at the time, and Mr. Hannam's conclusions were confirmed by the experience of several of our correspondents. Since that period we have received several contradictory statements, and one particularly from a high source, stating that good flour could never be made except from wheat fully matured. We see from the 'Cultivator,' that Mr. HANNAM has repeated his experiments on a larger scale, and that they have resulted in the strongest confirmation of his original conclusions, viz: that what he terms the "raw" state affords the greatest bulk and weight of wheat, and the best article for manufacturing purposes. That our readers may the better judge what is intended to be designated by the "raw state" we give a synopsis of the experiments. Five different cuttings were made as follows:

No. 1,	reaped	August 12th,	stacked	Aug. 26th.
No. 2,	"	"	19th,	" " 31st.
No. 3,	"	"	26th,	" Sept. 5th.
No. 4,	"	"	30th,	" " 9th.
No. 5,	"	Sept. 9th,	"	" 16th.

No. 1 was very green, only fully formed in the berry, and raw; No. 5 was fully ripe. No. 5, in the sample, was bold, but coarse; while Nos. 1 and 2 were finer in the skin, but small, showing they had shrunk some. The raw cut

No. 3, was unexceptionable, being as plump as No. 5, and superior to 1 and 2, in thinness and uniform cleanness of skin. There was little difference between 3 and 4, except that the last was more rough than the first.

It was No. 3, cut a fortnight before it was fully ripe that is designated as "raw." From the various experiments, which seem to have been fully and fairly conducted, it appears, that No. 3 is superior to all the other varieties; giving more per bushel than No. 5, by $6\frac{1}{2}$ lbs. of flour; and a gain of about 15 per cent. on the flour of equal measures of grain. 100 lbs. of wheat No. 3, makes 80 lbs. of flour; while 100 lbs. of No. 5, yields 72 lbs. showing an advantage of 8 per cent. in favor of grain cut raw.

In grinding, it was found that No. 5 ground the worst, worse than No. 1. In No. 5, were a greater quantity of flinty particles which would not pass the bolt, than in any of the others. The bran from No. 5 was coarse and heavy; while that from No. 3 was "thin as a bee's wing."

The actual value of flour for the purpose of nutrition, depending in a great measure on the gluten it contains, a sample of Nos. 3 and 5, was analyzed by Prof. Johnston, and he found them to contain respectively, No. 3, 9.15 per cent. of gluten; No. 5, 8.9 per cent. of gluten. Thus proving that the wheat which gave the greatest quantity of flour, gave also the best.

For the Southern Planter.

COAL-TAR ON ROOFS.

Messrs. Editors.—In your Planter for March "An Inquirer" wishes to know the value of coal-tar applied to the roofs of houses. Some ten years ago, having renewed the shingles on my dwelling, I gave them a coat of the coal-tar, and am well satisfied that the effect has been beneficial. It penetrates into the wood about as deep as oil, and it has maintained its lustre almost unimpaired by the weather. I think it will render the roof as nearly fire-proof as any other liquid substance. The only objection to it is, that it makes the shingles shrink considerably, and inclines them somewhat to crack. This, however, is not the direct effect of the tar; but because of the greater power which the rays of the sun have on all bodies of a black color. I would recommend that the shingles be not more than $4\frac{1}{2}$ to 5 inches wide; that they be nailed on during a dry season and made to fit close; and that the tar be applied when they are perfectly dry. The roof should have two coats.—The tar should be warmed over a fire in order

to make it more fluid, and the first coat particularly should be well worked in between the shingles. It gives a black, glossy color to the roof, and cannot fail to add to its durability.

T. S. P.

NEW METHOD OF GROWING ASPARAGUS.

The Editor of the Horticultural Magazine, recommends a trial of the following method of growing asparagus, which is practiced at Nice, and of which a high account is given in the London Gardeners' Chronicle. Take a quart wine bottle; invert it over the head of a stalk of asparagus just rising from the ground, and secure it by three sticks so that it cannot be knocked over. If left in this state, the asparagus will grow up into the interior of the bottle, and, being stimulated by the unusual heat and moisture it is then exposed to, will speedily fill it. As soon as this has taken place, the bottle must be broken, and the asparagus removed, when it will be found to have formed a thick head of tender delicate shoots, all eatable, and as compact as a cauliflower.

Stockley, Nansemond Co. Feb. 21, 1843.

To the Editors of the Southern Planter:

Gentlemen,—I notice in your valuable periodical that Mr. JAMES GORDON took the premium offered by the Henrico Agricultural Society last year, for the best acre of sweet potatoes, viz: 544½ bushels to the acre, which we Nansemond planters think an enormous yield. The sweet potatoe crop is one of our chief staples, and we pride ourselves more on the quality than the quantity of the article. I do not think the average crop in my neighborhood has exceeded 75 bushels per acre, during the last five years. The object of this communication is to beg the favor of Mr. Gordon to give us his "*modus operandi*," through the medium of the Southern Planter, the quality of his land, quantity and kind of manure used, &c. &c.

Whilst my pen is in hand, I will give my limited experience with regard to the mooted point of suckering corn. After a trial of five years, I have satisfied myself that irreparable injury is done the corn by pulling off the suckers. I think that in consequence of the wounds inflicted on the growing plant, the crops of fodder and corn are both greatly diminished. I will cite one year's experience, (1840). My corn was planted 4½ by 4 feet, and two stalks allowed to remain in the hill. In July it was not unusual to see four suckers on many stalks. I directed twenty rows through the middle of the field to be suckered; balance left with all the suckers on; at gathering time, very many of the suckers had each a full ear on them, growing from the side of the stalk, many of the parent stalks producing two large ears. The suckered, produced

no more than the *unsuckered parent stalks*. The latter furnishing me an additional quantity of both grain and fodder, independent of the labor saved.

D. H. HATTON.

In an experiment of sowing corn *broadcast*, on the 1st of June, at the rate of one and a half bushels per acre, on rich land, Gen. Harmon, of Wheatland, Monroe county, New York, obtained 18 tons of green stalks per acre. The stalks were small, and almost entirely without ears, and so full of saccharine matter, that the cattle ate them perfectly clean when dry, though they were not cut up fine. The yield was estimated at six tons dry fodder per acre, and was raised on a clover sod turned over and sown the last of May, and the corn cut September 15. The saccharine matter, which goes to supply the corn in the ear, is retained in the stalk when not suffered to ear, and materially adds to its nutritive properties.—*American Agriculturist*.

For the Southern Planter.

TO DESTROY IVY, &c.

Ivy and laurel may be useful, but until I ascertain their value, I shall continue to eradicate more or less of them every year. One inducement to destroy ivy is for the purpose of adding to my arable and pasture fields; and another is the preservation of my sheep from this poison. The use of the grubbing hoe for this purpose is a tedious business, and I have determined to try an implement which I shall call a Grab. I have no doubt but that an implement can be made of iron, which will tear up by the roots every ivy, and dogwood, and other stole and brush rooted shrub. Those of much height should be cut off a few feet above the ground, and the grab fastened toward the top, and immediately under a knot or limb. A yoke of oxen hitched to the grab, by means of a chain, will do the work; but in some cases, it may be necessary to assist, by cutting a root at the off side. What think you of an implement after the fashion of a blacksmith's tongs, much stronger of course, with the handles widely extended, and the grab end curved inward and somewhat sharp; or what think you of an implement after the fashion of dividers or compasses; one side being 12 inches long with a ring attached, and the other 9 inches long and terminating in a hook? Now if a chain be drawn through the ring and dropped over the hook I think we shall have a severe grab. The inner edge of this should also be sharpened, and the plates should be 2½ or 3 inches broad and about 1 inch on the back.

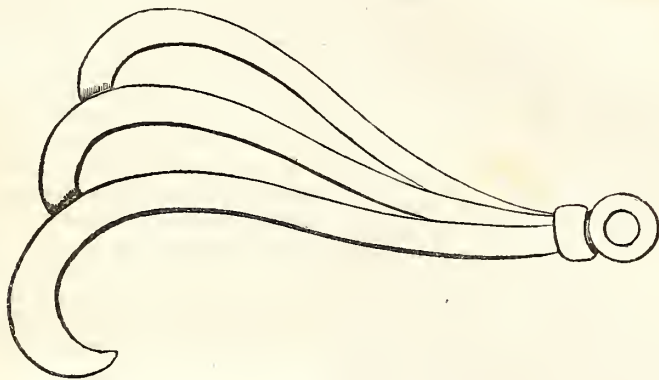
I would be very thankful to any one who will insert in this paper, the model of a grab on a better plan than either of the above.

D. D.

February 18, 1843.

We noticed in an agricultural store in Boston a very simple and efficient implement, that we think would probably meet the views of our correspondent. We will endeavor to represent it in the following drawing. It may be called

A GRUBBING HOOK.



Three bars of iron, two inches wide and a half inch thick, about two feet long, are welded together at one end, where they terminate in a ring through which a chain may pass. The other ends, which are hooked or bent as represented in the engraving, are separated, the two outer ones diverging three inches, each, from the centre bar. A hole is dug on one side of the bush or shrub to be eradicated, and the prongs of the hook are inserted under the roots. The team (oxen are best) is then hitched to the chain passing through the ring, and with one crack of the whip the work is done.

For mere *shrubs*, a much smaller and lighter hook than the one described would be more handy and equally efficient.

GARDEN VEGETABLES.

EARLY CUCUMBERS.—The following has been found by the writer, an easy and successful way to raise them. Place small pieces of dead turf, as large as one's hand, just below the soil in a hot bed, and plant the cucumber seeds upon them. When the stems are two or three inches long, the pieces of turf are removed, plants, roots, and all, to rich garden soil, and they will advance rapidly in growth and produce fruit two or three weeks earlier than those planted in open ground. Suitable turf is easily obtained where grass has been inverted the previous summer or autumn. The young plants should be set out as soon as they will probably escape frost.

EARLY TOMATOES.—Where there is no hot bed, these have been successfully started in pots kept in a warm room, and the fruit ripened a week or two in advance of those otherwise treated.

While the fruit is yet green, I have much accelerated the ripening, by removing the larger leaves from dense bunches of the fruit, and placing white boards behind them, so as to reflect the sun's rays strongly upon them. They soon

became red, while the rest remained unchanged in color. Would not planting them, as well as many other of the smaller garden fruits, against a white washed fence or wall, prove of great advantage? It is estimated in England, that a good wall for fruit is equal to an advance of six degrees towards the equator; why then is this powerful means of producing early fruit, so generally overlooked in this country?

EARLY POTATOES.—It is well known that the eye end of a potato will yield a crop earlier by some days, than the root end. This appears to be owing simply to the earlier growth of the sprouts from the eye end. Earliness will be greatly increased by placing the seed potatoes in a box of moist sand, early in spring, in a warm place in the house; and then planting them when the shoots are about two inches long, taking care not to break them off.

LIME.—Its tendency to diminish the growth of leaves and stem, and increase that of seed and fruit, is well known. It had been applied two years before to the strawberry bed, at the rate of about half a bushel to a square rod. A

similar effect was observed on tomatoes, when the manure they received, which was well rotted, had a small quantity of lime thoroughly mixed with it. The growth of their stems was moderate, and the product in fruit, very abundant. Others, manured without lime, grew abundantly in stem, and the product of fruit not quite so great. Slacked lime was used. The difference might have been owing to other causes; at any rate, more experiments are needed.

EARLY LETTUCE.—This was obtained at least *three weeks earlier* than other lettuce sown in the hot bed, by taking up plants, sown the previous autumn in open ground, and transplanting them into the hot bed as soon as it was made. They were urged forward in growth rapidly, by the new heat they received, and formed heads four or five inches in diameter, while the other lettuce was hardly an inch high.—*Cultivator*.

For the Southern Planter.

King William, Feb. 15, 1843.

Messrs. Botts & Burfoot,—I send you below a condensed statement of some of the experiments reported to the King William Working Agricultural Society at their fall meeting. You are aware each member is bound by the constitution to report an experiment made by himself to every meeting under the penalty of one dollar. The day of our meeting at Mulberry Hill Tavern was not very favorable, nevertheless, it was well attended and some specimens of superior butter, articles of domestic manufacture and animals were exhibited. On such of these as were thought worthy premiums were awarded, and an interest in the Society excited which we hope will be increased and lead to valuable results.

Respectfully your friend,

W. GWATHMEY.

Lewis Littlepage's Experiments.

1. Impressed with the opinion that fall fallowing for corn was more injurious to the land than spring, about 25th of March this year, he prepared the land and planted in corn, which proved a very short crop—the fallow was in clover—the cut worm very destructive. His conclusion is that the loss of corn is greater than the benefit to the land.

2. The rows on which corn was shocked, in his wheat field, were sown in oats in spring—and clover seed sown over the field. That on the oat rows grew much more luxuriantly, and when the same field was fallowed for wheat, the effect was very apparent in that crop also.

George R. Tran's Experiments.

1. Soaked seed corn in copperas water two days, (half pound to the gallon of water.) It

was not pulled up by the crows or destroyed by cut worm. Other corn adjacent, without copperas was destroyed.

2. In 1841, sowed clover seed after corn, the last time it was worked. They came up and the crop succeeded very well.

Corbin Brazton's Experiment.

Planted harvest beans which did not mature in time for ruta бага.

Edward Hill's Experiments.

1. On peas planted with corn. Two rows of corn planted in peas, every other hill, yielded by accurate weight one pound of corn less than the two next adjoining without peas, both cultivated alike.

2. On drilled wheat. An acre drilled nine or ten inches apart, cut and threshed carefully, yielded only a few gallons more than an acre sown broadcast, immediately adjoining. Considers it not worth the additional trouble of drilling.

William S. Fontaine's Experiments.

1. On harrowing in clover seed the last of March on wheat, alternate rows were left unharrowed. The harrowed wheat, to the eye, for a fortnight appeared benefitted. The clover to this time is better set.

2. Ten acres of purple straw wheat was cut in the dough state—product about 60 bushels, very much shrivelled, and unsaleable if it had not been mixed with the rest of the crop. Ten acres, rather better land, fully ripe, gave me 82 bushels wheat, plump to the eye, and weighing 57 lbs. to the bushel.

From a partial experiment he is induced to believe that wheat after corn, produces more in single than double beds.

Richard Gwathmey's Experiment.

Discovering rust in his late crop of wheat, he commenced harvesting, and continued six days. Having carefully stacked the first and last days, cutting separately, he selected a dozen bundles from each, and threshed them; and on weighing, he found the product of the first dozen to be three-fourths of a pound heavier than the last. He afterwards sowed ten grains of the green parcel, each of which sprouted readily and put up a vigorous spire.

William Gwathmey's Experiments.

1. Lime applied on low light land with black soil, (150 bushels to the acre,) will not destroy sorrel. Six rows of this limed land without any other manure than the natural grass, yielded 763 ears of corn, measuring 7 bushels. Six of the same adjoining, liberally top-dressed with stable manure, when the corn was well up, yielded 1,000 ears, measuring 10½ bushels.—Six, of land adjoining, top-dressed with the manure alone, yielded 777 ears, measuring 7½ bushels.

2. To ascertain the effect of covering up the vines in cultivating the sweet potato, he had the vines covered in two rows, and designated by a stake. The two rows adjoining, planted with similar seed and cultivated (as the crop,) with the earth drawn up, leaving the vines uncovered, yielded three pecks more, of larger potatoes.

Reported by request of the Society.

W. GWATHMEY, *Secretary*.

The very interesting address of the President, Dr. Corbin Braxton, which, by the unanimous vote of the Society was requested for publication, (and promised) has not yet been furnished.

THE LOCUST TREE.

There are probably but few trees more beautiful and ornamental than the locust. It is also valuable for timber, being of a close, solid texture, and as durable for most purposes, as oak or walnut. The trees often attain a large size, and at the proper season of inflorescence, the yellow locust, is festooned with clusters of white flowers, which give it a most beautiful appearance. We have several of these trees growing, and in many sections of our State they are beginning to become quite common, and are propagated both for ornament and use. The great difficulty, however, experienced in causing the seed to vegetate, operates as a discouragement with many; it requiring to be prepared before planting in order to soften the hard and shelly pericarp or hornlike envelope in which nature has deposited the germ. This is performed in the following way. Having first separated your seed from the pods place them in an iron porringer, and pour over them a quart of water, previously heated to the boiling point. Set the porringer aside, and suffer the water to cool gradually. After twenty-four hours decant the water from the seed, and select such as have opened for immediate planting. If any yet remain hard, let them undergo a similar submersion, and at the end of the next twenty-four hours, select again such as have opened, and continue this process until all that are capable of vegetating have opened, and been planted out. Another plan and perhaps a somewhat more economical one, so far as time is concerned, is to subject the seed to the action of *nitric acid*, mixed in the proportion of half an ounce to two quarts of water. The seed should be steeped in this mixture for twenty-four hours before planting, and the water kept tepid or slightly warm by means of a stove or oven. In this case it is not necessary to repeat the process as the good seed will at once evince signs of vitality and germination, while that which continues to be unaffected at the expiration of the twenty-four hours is probably foul or imperfect and should be thrown away. Seed, thus prepared,

if planted in a rich, warm soil, in April, will take a vigorous start, and the plants be fit for transplanting in the course of the second or third year after. The trees should never be suffered to stand nearer than fifteen feet apart in any soil, and should they be consigned to one thin and light, the distance should be *twenty*. As they increase, care should be taken to clear out all dead wood from the tops, and to keep down the shoots, where the soil is rich, which will sometimes issue from the roots.

Maine Cultivator.

So valuable has the locust become, not only for posts, but for its uses in ship building, that its growth would probably afford the very best use to which many of the light lands on our water courses could be applied. Facility of water transportation is an indispensable requisite to the profitable produce of any kind of timber. The locust is said to be a great improver of the soil, inasmuch as it returns more than it draws from it, its deciduous offal being particularly enriching. No man ever saw a locust tree without a peculiarly luxuriant growth of grass underneath it.

The crop would be a slow but sure one.

For the Southern Planter.

BURNING COAL.

Messrs. Editors,—As it seems that the farmers are about to commence burning coal for agricultural purposes, and as they are generally ignorant of the process, I will add my mite to what I conceive to be a good cause, by giving some directions.

Seasoned wood is best, because it burns more thoroughly in less time, consequently requiring less attention and producing more coal. Regular colliers cut their wood into cord length, but the farmer may save time by cutting his six feet. On level ground kilns are generally made circular; on hill sides they may be made an oblong square, the length being up and down hill. A kiln of sixteen feet diameter is a good size; and now for its construction. Drive down a peg for the centre, around which draw a circle at the distance of eight feet; on which circle drive pegs, or what is better, cut a narrow trench with a grubbing hoe. Cut blocks of wood three feet long, with which build a pen on the centre nine feet high; around which set up your wood, with the large end downward, and about two feet from the pen. As the wood is packed, fill underneath with short pieces; and as the packing advances fill throughout with other short pieces, for the purpose of giving a slope for covering.

The pen, and filling near the heart of the kiln, should at any rate be of seasoned wood, otherwise the fire will start badly.

When the foundation is complete, the next thing may be to arrange the air holes. These are made at the bottom of the kiln and about six feet apart, by laying two blocks of about two and a half feet long, and six or eight inches thick, with one end against the kiln, and twelve or fifteen inches asunder; over which lay broad pieces of wood. Now proceed to cover by casting on leaves or shavings and earth. When the earth has been packed three or four feet high, stand thereon and cut off any spur ends which may be likely to obstruct a neatly finished covering; which spur ends with other blocks of three to one foot long are to be packed on and around the upper portion of the pen and on the foundation; and thus rounded off neatly for covering. Now proceed to cover till nearly closed, when a few armful of seasoned wood must be cast to the bottom of the pen, then fire, and more dry wood till filled. When the dry wood is fairly on fire lay some billets of wood across the top, and cover with leaves and earth.

The air will enter the kiln through about half of the air holes, and the smoke, or rather steam, issue from the remaining half; and so soon as the kiln is fairly on fire every crevice above the air holes should be closed. In ten to twenty hours after being under way, the heart of the kiln will have become hollow, when blocks of wood should be filled in, and again closed.—Where the steam strikes, the fire is extinguished, consequently when the wind continues at one point, that side burns first which is to the wind, and on this side in windy and dry weather it will be necessary to close the air holes by degrees as the kiln sinks; but those on the opposite side should be kept open throughout, that the steam may pass off as quickly as possible.

Once in three or four hours the kiln, or kilns, should be attended, and the whole body beat or stamped down, so that the pores may be kept closed, and any point likely to break, detected and timely repaired. One man can attend five or six kilns. When the steam ceases to issue the wood is charred, and the sooner the coal is drawn the better. For this purpose a rainy or snowy day is preferable, or if water is convenient the coal may be extinguished with this; otherwise it must be done by casting on the dusty particles of the covering.

For drawing down the coal the hoe is best, and for dusting the shovel is best. Large kilns will require drawing at two or three different times, at intervals of eight to twelve hours.

Two cautions and I have done. Have you put out the fire? you say yes—well, go around and put it out again; and after starting off, go back and put it out once more. And lastly, mind how you stamp about the top of a kiln

when the heart is hollow, for there is some danger of falling in.

A COLLIER.

Amherst, March, 1843.

ADVICE ON THE CARE AND MANAGEMENT OF TOOLS.

From a new edition of the Cabinet Maker's Guide, we quote the following:

"The goodness of saws, chisels, and other edge tools, depends upon the quality of the steel, which should be uniform throughout, and it is always better to have them tempered too hard than too soft, for use will reduce the temper. If at any time you wish to restore the temper, and to perform the operation yourself, the best method is to melt a sufficient quantity of lead to immerse the cutting part of the tool. Having previously brightened its surface, then plunge it into the melted lead for a few minutes, till it gets sufficiently hot to melt a candle, with which rub its surface; then plunge it in again and keep it there until the steel assumes a straw color, (but be careful not to let it turn blue,) when that is the case, take it out, rub it again with the tallow, and let it cool; if it should be too soft, wipe the grease off and repeat the process without the tallow, and when sufficiently hot, plunge it into cold spring water or water and vinegar mixed.

"By a proper attention to these directions, and a little practice, every workman will have it in his power to give a proper temper to the tools he may use.

"If a saw is too hard, it may be tempered by the same means; if you are near a plumber's shop, you may repeat the process conveniently and without expense, when they are melting a pot of lead.

"In other cutting tools you must wait till the steel just begins to turn blue, which is a temper that will give it more elasticity, and at the same time sufficient hardness."—*American Mechanic.*

February 13, 1843.

MESSRS. BOTTS & BURFOOT:

Gentlemen,—An illness from which I am just recovering has prevented me, until now, from asking you for as much room in your paper as will suffice to notice a very abusive attack upon myself, signed "Vindicator," which was one of the first things I saw upon opening your January number. Your sense of justice, I hope, will grant my request, especially when I assure you, that I shall strive to be as brief as possible; and shall have nothing more to say to Mr. Vindicator, even although he should repeat similar abuse in your next number.

This writer presents himself to your readers

in the imposing character of a volunteer champion of Virginia husbandry; and the first specimen he has given us of his powers in that capacity, is, not only to accuse me of "most grossly misrepresenting" the agriculture of my native State, in a letter addressed to the Corresponding Secretary of the New York State Agricultural Society, at his own request; but to assert, as of his own certain knowledge, that I am a man so fond of my joke, as not to scruple, at any time, to sacrifice the truth to it. These are not his identical words; but I take it to be the plain English of the expression, "that he will indulge it (his joke) at the expense of things dearest his heart." In other words, he will tell a falsehood, if he can make people laugh by it. This truly, is a very pretty character for one whom he calls "confessedly a Virginian, every inch of him!" His argument to disprove what I have stated as facts, is, that *he* has never seen what *I* have stated that *I* have seen; therefore, such things can never have been seen by any body. What I have uttered as mere matters of opinion, and especially in relation to the average produce of corn and wheat per acre, in the tide water portion of Virginia, which latter opinion he styles, "a charge of still greater import," he treats as if equally demanding a refutation. Such as he attempts to give, if thrown into the form of syllogism, would stand somewhat thus. All the people in the tide water part of the State must be in a starving condition, if the average produce of corn per acre be only fifteen bushels, and of wheat only five bushels.

But they *are not* in a starving condition.

Ergo,—my opinion as to the average produce of our corn and wheat per acre, must be utterly wrong. *Quod erat demonstrandum.*

Now, if the character for truthfulness and fair dealing which I have been striving through a long life to attain, can be destroyed by such an attack as Vindicator has made upon it, then is the effort to sustain it no longer worth making. But I confidently trust that it will remain what it has been for years past, notwithstanding this most unwarrantable assault; and that none who have any knowledge of me will ever question my facts, however they may dissent from the opinions I deduce from them. Had Vindicator been equally intent upon doing justice both to me, and to the cause which he professes to have espoused, as he seems to have been on defaming me, he would have given your readers, at least the substance of what I said in favor of our agriculture, in the letter which forms the subject of his animadversions. Then, your readers—very few of whom will probably ever see my letter—would have had an opportunity of forming a tolerably just opinion of it. But as Vindicator has managed the matter, they are all left to suppose, that the whole of this letter

contains nothing but ridicule and abuse of Virginia husbandry. Such must be the impression left on the minds of all who have read only Vindicator's representation of it. Permit me, therefore, to quote a short paragraph which, I confidently trust will suffice to acquit me fully, with every impartial man, of all the charges which this self-created champion of Virginia husbandry has brought against me.

In one part of my letter to the Corresponding Secretary of the New York State Agricultural Society there is the following passage:

"From the low averages which I have given you of the staple crops in middle and lower Virginia, you will probably form but a poor general estimate of the progress of husbandry in our State. Nevertheless, I can assure you, that in the aggregate, it has been very great in the last ten or twelve years; and that during the last two or three, it has advanced almost at a geometrical ratio. But this advancement, where it is most conspicuous, is still so partial and confined to particular neighborhoods, and so slight elsewhere, that strangers who have no personal knowledge of our State, cannot form a correct opinion, merely from hearing what is supposed to be the general average of our agricultural products per acre. To judge well of the whole extent and amount of our progress in husbandry, they should know the past as well as present condition thereof. They should see the best as well as the worst of our farms; they should examine those around our towns, on some of our navigable rivers, in the Valley of Virginia, and in several of the counties immediately below our first range of mountains. Then, indeed, they could decide, as our Congressmen say, '*understandingly*,' on the subject; and such an examination, I am confident, would discover to them many farms as well managed, in every respect, as any in the United States; although, in proportion to our whole territory, the number would probably be smaller than in some of the States north of the Susquehanna."

I will quote no more, but leave it to every impartial man to decide, whether there is even a shadow of propriety or justice in calling a letter which contains such statements, "a most gross misrepresentation of Virginia agriculture."

After having had so much cause to condemn and to resent the conduct of Vindicator towards myself, I am gratified to find, that there is at least *one* thing for which I can and will thank him. It is, that *he*—an entire stranger to my family—not having the most distant connection with them, so far as I know and believe, should have proved himself so much more sensitively alive to the agricultural fame of my paternal grandfather, than *I*, his naughty grandson, have done. My only excuse—if indeed, *such a deed* admits of any—is, that I had the story from my own father, who, I presume to say, was

probably quite as good a son as Vindicator himself; that the old gentleman did not enjoin me to secrecy; and, therefore, that I thought myself at liberty to repeat it, particularly as there could be no stronger proof of the condition of our husbandry in lower Virginia. Whether it was *in* or *out* of place for me to say any thing of such a remote period, I shall leave it to others to decide.

I remain, gentlemen,
Yours, with regard,
JAMES M. GARNETT.

There is nothing we have so earnestly endeavored to avoid as the admission of personal controversies into the columns of the Planter, and yet, notwithstanding our utmost vigilance, they have on one or two occasions insidiously crept in. When we received the article of "Vindicator," which was delivered in person, we scanned it with a careful eye, and seeing nothing in it but a critique upon a *public* document, mixed with a little raillery to be sure, we gave it admission that the public might judge between the author and Mr. Garnett. We are extremely sorry to find that Mr. Garnett takes an entirely different view of the article, and exhibits an irritation that we conceive it by no means calculated to excite. If a gentleman writes a public letter, he has no right to object to its being criticised, provided the criticism is free from *insulting* personalities. To find fault with the production, without attaching some blame to the author, is impossible, and for us to declare that we would admit no piece that inculpated an individual, would be to say, that we would admit no comment upon any article that was published. The facts adduced by one individual may be denied and controverted by another, the arguments of the one may be replied to and refuted by the other, but no personal abuse, ungentlemanly language, or charge of dishonorable motives, shall be indulged in the Planter, whilst we have charge of its conduct. Our general course, and particular and often expressed respect for Mr. Garnett, will, we hope, satisfy that gentleman that we conceived the article of "Vindicator" free from those objections. Thinking so still, hard as it is to resist an appeal such as Mr. Garnett makes, and coming from such a source, we would have refused to publish his communication, had we not received a request from "Vindicator," to whom we sent it, that we would do so, with an assurance that Mr. Garnett had wholly misunderstood the spirit of the article,

which was written in a pleasant mood by one of his warmest personal friends and admirers, and, we will add, by a gentleman who never entertained an unkind feeling towards him in his life.

From the New York Central Farmer.

ON DITCHING.

As I agreed to give you a description of my mode of ditching, I will now redeem my pledge. About twenty years ago, I purchased my farm in Whitesboro', and on this farm was about 130 acres on the Mohawk flats, and about 60 acres of that was covered with black ash timber, alders and bogs, and the water stood on it nearly the whole year; the 60 acres were not worth as much for any use then as 5 acres are now. Not being acquainted with farming much, I did not know how to commence right, but my first object was to improve my low grounds. I commenced by making small ditches which would soon fill up. I then made a bank or dike with a small ditch on each side, but that did not altogether answer the purpose intended for a ditch and fence. About three years ago I commenced in a different way, which seemed to answer all the purposes intended, that is, to drain the land effectually, and at the same time make a good fence. I make my ditches six feet wide at the surface of the ground, and three and a half or four feet deep, as the land may require, with a slope so as to bring it about one foot on the bottom, and take the turf from the top of the ditch and lay it up on each side with the same slope as the ditch, about one and a half feet high, leaving a lip of about four or five inches on each side of the ditch; on placing the rows of turf that distance back from the ditch, to prevent its caving in by the frost till the bank becomes solid. I make small sluices in the lowest places, through these side banks, for the water to draw off from the top of the ground. The raising of the banks on each side makes the ditch about eight feet on the top, with slope bank, so that horses or neat cattle cannot easily get over it; sleep will run over it. I lay out my lots from twenty to twenty-four rods wide; three ditches drain the land effectually. I have raised a very good crop of corn on some of the lowest of this land this year, and it has been a very wet season.

I will now say a few words about my mode of cultivating these low grounds; they are most profitable for meadow—I therefore seed them down as soon as they are subdued by ploughing, or the ground is smooth, they may be brought into a good quality of grass by sowing on seed and harrowing. I find it very profitable to give these lands a thin dressing with manure; it improves very much the quality and quantity.

Managed in this way, I get three or four tons of hay from each acre; I have taken four tons from 140 rods of ground, well dried. The best time to put on manure is soon after mowing; it will not need it more than once in four or five years.

I have made nearly 500 rods of these ditches; they cost about five shillings per rod; they are the cheapest fence I can make, and by cleaning out the ditches, you can keep the fence in good repair.

Yours, JULIUS WATKINS.

Whitesboro', Nov. 19, 1842.

For the Southern Planter.

TO IMPROVE A PINY OLD FIELD.

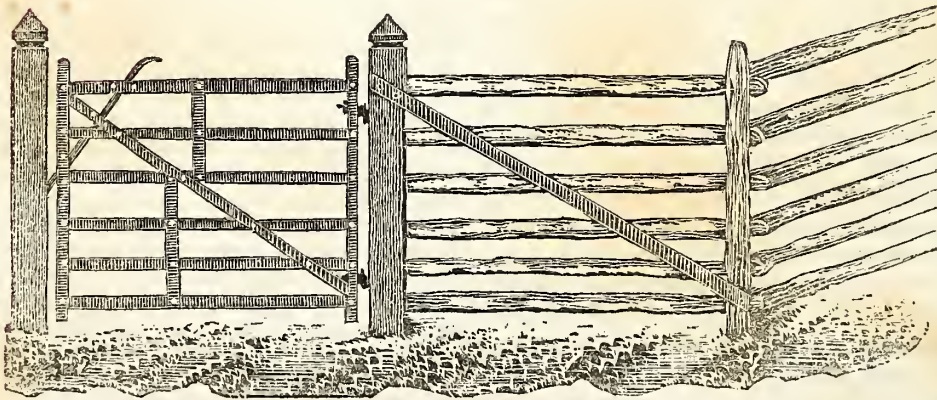
First belt the trees and cut down the bushes. The following year cut and burn every thing

into coal which is large enough, and scatter the burnings. That which is not large enough for coal should be spread on gullies and galls; and this should be completed by the middle of March. Now mark off the ground with a coulter, sow oats, (and grass seeds, if you please,) and cover with the same implement. For the purpose of making equal distribution of the manure, and to avoid cost in carriage, the kilns should be placed at about fifty feet distant; and that they may be of about equal size wood should be moved as required. Or if there be a surplus, the wood or coal can be moved elsewhere. At fifty feet distant, we have about eighteen kilns to the acre, which, if producing only one hundred bushels of burned earth and coal to the kiln, is one thousand eight hundred to the acre, which I would apply to the spot, and then comes the blessing.

OLD FLU.

For the Southern Planter.

G A T E .



Messrs. Editors,—In No. 1 of the Southern Planter for 1843, I noticed an article on the subject of engravings, in which you express a wish that your friends should forward you sketches, &c. with description of implements or fixtures which are of a novel or interesting character. I have taken the liberty to furnish you with one, which, whatever may be its merits in regard to interest or novelty, I cannot but flatter myself will be found useful to farmers. I therefore send you the abovesketch, the object of which is to give you an idea of securing gate posts so firm as not to be moved by frost or otherwise; it can be used either for post and rail or the common

worm fence. The only thing necessary represented above, is the brace from the top of the back post of the gate to the first corner of the fence. All that is necessary is that it should be secured at both ends, as the weight of the fence at the corner is sufficient to keep the back post in a perpendicular position; therefore, if you think it desirable to publish it, you may, with the assurance that it will answer an excellent purpose, as experience has proved it without doubt. I will here remark that it would be necessary to place the first pannel of fence in a straight line with the gate when shut; when the gate is open, the brace will not act as repre-

sented, but the duration of that position will not be for any length of time; if so, there can be a pebble or something else substituted that is convenient to be placed under the outer stile of the gate.

Yours, &c. **WILLIAM RICE.**
Bridgewater, Feb. 1, 1843.

From the American Agriculturist.
CONE'S DYNAMOMETER.

Gentlemen,—I send you a rough drawing and description of a very cheap, simple, and effectual dynamometer. Every farmer can have one if he chooses; the only thing is to hit upon some plan to have them uniform throughout the Union.

Mr. Cone exhibited his plan at the Genesee Cattle Show and Fair, in October. The time was so short, however, after the ploughing match was over, that it could not be applied to any of the ploughs. It was sufficiently tried, however, to satisfy any one as to its accomplishing all that could be required of the most perfect instrument.

Take the beam of any patent scales that will weigh as high as 10 or 12 cwt. Suspend it by the upper hook, and put sufficient weight upon the lower hook to balance the beam. Then hang upon the small end a one pound weight, and put sufficient weight upon the lower hook to balance. Ascertain the number of pounds upon the lower hook requisite to balance the one pound. The beam used by Mr. Cone required 32 lbs. on the weight hook to balance one at the small end. Hitch the lower hook to the clevis of the plough, and the team to the upper hook. The small end runs out upon the land side, at right angles to the plough. From the small end of the beam bring a wire near to the handle of the plough; attach to this wire the upper end or hook of a common spiral balance, and make the other end of the balance fast to the plough—*The spiral balance becomes the index to the force required to move the plough.* Thus if the index of the balance marks fourteen pounds, then the force exerted on Cone's scale would be $14 \times 32 = 448$ pounds.

You perceive at a glance, that the principle is perfect. It brings the index directly under the eye of the ploughman, and it is easy of application to any other subject, when it is desirable to ascertain the force necessary to move a ponderous body.

In applying it to a plough, it should be so constructed as to work perpendicularly instead of horizontally. This could be done by having a guide made fast to the beam in which the beam of the dynamometer should play. The balance could then be made fast to the upper slat or round of the plough, and be more convenient for observation; besides it would not be effected by any inequalities on the surface of the ground.

Unless some person takes up the subject, I fear we shall not have a uniform scale. I wrote to Mr. Ellsworth, the Commissioner of Patents, asking him to give the dimensions, and then we should have it uniform throughout the Union. If no other person does it, I will prepare one by the first of February.

Sincerely yours,

T. C. PETERS.

Darien, N. Y., December, 1842.

For the Southern Planter.

A TABLE,

Showing the number of corn hills and other plants in an acre of ground.

Feet. Feet. No. of Hills.	Feet. Feet. No. of Hills.
20 by 20—108	5 by 4—2178
19 by 19—120	5 by 3—2904
18 by 18—134	5 by 2—4356
17 by 17—150	5 by 1—8712
16 by 16—170	4½ by 4½—2151
15 by 15—192	4 by 4—2722
14 by 14—222	4 by 3—3630
13 by 13—257	4 by 2—5445
12 by 12—302	4 by 1—10890
11 by 11—360	3½ by 3½—3555
10 by 10—435	3 by 3—4840
9 by 9—537	3 by 2—7260
8 by 8—680	3 by 1—14520
7 by 7—888	2½ by 2½—6969
6 by 6—1210	2 by 2—10890
6 by 5½—1320	2 by 1—21780
5½ by 5½—1417	1 by 1—43560
5 by 5—1742	

Messrs. Editors,—I send you the above as a very useful and convenient table that I have compiled for the "Planter." The calculations are, I believe, entirely correct.

Permit me to congratulate you on the March number. It is worth all the money I ever paid you.

Yours respectfully,

PH. B. WHITE.

From the Farmers' Cabinet.

FENCES.

Messrs. Editors,—As materials for fencing are becoming more scarce every year, in this part of the State, our farmers have been turning their attention for some time to the means of lessening the expenses which are continually occurring, to keep their farms in suitable repair. Our fences are either the worm, post-and-rail, or thorn. Unfortunately for us, the thorn has been attacked by insects, which have injured it exceedingly—in some instances it has been almost destroyed. The post-and-rail fence has now become very expensive, in consequence of the scarcity of white oak timber—the best of which

is purchased to be cut into scantling and ship stuff. The plan now coming into use for the worm fence, is to set it upon a good sized stone, elevated at least six inches from the ground, as heretofore.

The rails are first prepared in the following manner:—A measure—say of shingling lath, of the length of the rails, is procured, and holes bored about half an inch in diameter, and four inches from the ends; it is laid upon the rails, and holes bored in them corresponding with those in the measure. When a number of rails are so prepared by boring, and ready to be put into fence, an iron rod suitable to the holes so bored, is set upon the stone or block, on which the fence is to stand, and then the rails are to be inserted on the rod until the panel is completed. The rod is to be bent about one and a half inch at the stone, so that when the fence is completed, it may be clenched or bent over the bottom rail—the panel is secured by making a hitch with a chain or rope, over the joint, and then bending or clenching the iron rod on the top rail—some prefer driving a small wedge at the side of the rod, instead of clenching it, so that the fence might the more easily be removed, if at any time it should be found necessary.—The most expeditious and convenient way for making such a fence, is for two persons to be engaged at it at the same time—one at each end of the rail boring the same simultaneously, and then assisting each other in placing it in the fence. A man can bore many hundred holes in a day, and the expense in preparing and setting up a panel, including the rod of iron, would not exceed the expense of preparing and setting up a panel of post-and-rail fence. A great advantage to the farmer in this method of using the iron rod is, that it holds the rails so completely firm at the joint, that no wind as yet, has been of such violence as to move it from the foundation; such a fence, made of good cedar or chesnut rails, will endure until it wears out with old age.

In the ordinary worm fence, each joint requires two stakes, which of cedar or chesnut, cost with us considerably more than the rod of iron. The oak post undressed, is worth about fifteen cents—the two stakes for each joint of the fence, worth twelve and a half cents. Now counting all the expense of both kind of fences, I am well convinced that the iron rod fence is cheaper by fifteen cents a panel than the post fence—besides, the posts rot out, and it will be necessary to obtain a new set every twelve or fifteen years—and then there will be a loss of at least ten per cent. in supplying the place of broken rails and re-sharpening them and others. The iron rod will cost about seven cents—for a five-rail fence, it should be cut about four feet nine inches. The lap of the rails need be no more than about four inches, and the worm

about four feet—such a fence, with this worm, will stand the heaviest blows that we are accustomed to in this climate, especially if the rod be well clenched on the top rail. There may be a saving of one, or even two rails to the panel, in substituting blocks of wood cut short, and bored so as to suit the rod through which it is to be inserted.

If the above communication may be considered worth inserting in the Cabinet, it is freely at your service.

AN OLD FARMER.

Salem County, N. J., Dec. 22, 1842.

We have our doubts about the value of this mode of fencing, although there is something novel and ingenious in it. We incline to our old opinion, that post-and-rail, when properly made, is the cheapest and neatest fence that can be constructed. However, a writer in a subsequent number, in whom we think we recognise an old and experienced friend, lauds the plan very highly whilst he suggests some improvements, which will be found in the following extracts from his communication:

"In the first place, then, I find that a *worm* or *angle* of three feet, is sufficient for the purpose of perfect strength; producing an elegance of curve, far more pleasing to the eye than the straight fence, for any situation, and requiring but very little more ground space than it: while, at that angle, the loss in the length of rails in a panel of eleven feet, is nine inches only; a fact, which would scarcely be credited, were it not proved by demonstration. But in the directions given in the Cabinet, there are some things which, I think, can be improved upon; for it must be very difficult to bend the rod of iron at the stone and clinch it over the bottom rail, if the rod be of a size to give sufficient strength to the fence, without shaking and injury to the work; neither can 'an inch and a half' of bar be sufficient length for the purpose. And then, what is to keep it in its proper place on the stone, unless that be broad, in proportion to its height? Now, in my plan, I have overcome this difficulty and objection, by merely letting the iron rod into the stone about an inch and a half, and fixing it there with melted lead; a labor and expense not worth the naming, when compared with the service rendered. It seems to be intimated also, that a panel at a time can be finished; but it will be found that the rails must follow each other singly, for a considerable length of space, before one panel can be finished, as the ends of them must lap one over the other—but this is of no importance. Not so, however, with the proposal to clinch or bend the rod over the top rail—a work which I should deem al-

most impossible, without destroying the fence by shaking it to pieces. And then, in the event of any of the rails failing, or a wish to remove or repair the fence, how are these clinchings to be raised up, without breaking them off, and injuring the fence? Now, for this trouble and difficulty, I have substituted the very simple plan, of punching a key-hole within half an inch of the end of each rod; and when the top rail—which should be stout and half round—is placed, I shall procure a piece of iron hoop, say six inches in length, punch a hole in the middle of it for the reception of one end of the rod; insert it, and drive a key through the hole and clinch it; and then bend the ends of the hoop to fit exactly, and embrace the end of the top rail. Thus, I have a fence erected in a much shorter time than would be required for the fixing a post-and-rail fence, that can be removed in a quarter part of the time; and the first cost cannot be one half as much; while the insertion of the rods into the stones will constitute it one of the strongest that can be devised; as the angles, acting on the principle of the arch, present a resistance that cannot be overcome by any common occurrence.

"Unless the stones are of considerable thickness, I would advise a block to be put under the first rail; and before placing the top rail, a block of sufficient thickness to raise it to the required height for pinning or keying down tight upon the iron hoop, must be supplied; this will require care and a little practice, but neither art or much labor. When the fence is finished, the top rail ought to range so as to form a perfectly level line; and this is to be obtained by seeing that the tops of all the rods are of the same height, before placing the first rail. It is needless to advise, that these blocks of wood be of the most lasting and enduring nature, and not liable to split. And I would take the present opportunity to urge upon your readers, the great importance of cutting all wood designed for fences, and indeed for every other purpose, in May; strip off the bark and split it to the size required, and expose it to the sun's rays, by setting it on end. I have long satisfied myself, that such timber will last—*how many times longer I can't say*—but I went some time ago to see a post which had been cut in full leaf, and placed in its position in the revolutionary war, and there it remains, firm and sound at the present day; and at the same time I brought away portions of a part of a fence, which had already stood out two other sets of rails cut in the autumn and winter—that having been cut in May or June, and placed immediately in fence."

The cost of the iron rod is either misprinted or under estimated. Half inch round iron weighs about ten ounces to the foot, and is worth about

five cents a pound. The rod will consequently cost about fourteen, instead of seven, cents, to the panel.

For the Southern Planter.

THE PREPARATION OF THE LAND AND THE CULTIVATION OF THE TOBACCO CROP.

NO. II.

Messrs. Editors,—In accordance with the plan proposed in my last communication, I shall follow Mr. Minor in "the Preparation of the Land and the Cultivation of the Tobacco Crop." The preparation which he recommends for new grounds, is much better, and more thorough, than that which is usually practiced; and I should be glad to see it universally adopted.—But our writer when he comes to speak of lot lands, remarks that "In general it is considered *bad economy to manure land for tobacco*, both because the quantity required for that crop is greater than for any other, and because the quality of the product, as well as that made on low grounds, is coarser in fibre and less marketable." This is the erroneous opinion to which I alluded in the close of my last number. And I feel fully assured that if we have made no other improvements in the last twenty years in the growth of tobacco, we certainly have in this particular.—And I think it would not be difficult to show, that the practice founded upon this opinion, has done more to injure the planting section of Virginia, to lay waste its lands and timber and impoverish its people, than any one whatsoever. You see at once, that on this principle, the axe must of necessity be appealed to every year for a crop, and ("as it is considered *bad economy to manure*,") the lands thus cleared are after a few years worn out and exhausted. And thus the unhappy planter, as if haunted by the genius of poverty and pressed hard upon by gullies and hens-nest grass and pines, betakes himself year after year with fancied security to the forest. He puts forward his veteran knights of the grub-hoe to wage a war of extermination upon the dogwood and chinkapin bushes—and while "up by the roots" is their watch word—they of the axe follow in quick succession, and attack the sturdy spanish oak, fore and aft, front and rear. With the like zeal and intrepidity, they are followed by the heavy armed knights of the maul and wedge, who march slowly and steadily to the conflict—seeing the forms of their stately victims lie prostrate before them, their limbs mangled and severed from the body, with savage ferocity they attack the limbless trunk—"drive home," they shout, and sever every ligament. This wasting warfare is thus prosecuted with a zeal worthy of a better cause, until the poor planter is routed by a hoarde of creditors; his knights, seized with their arms upon them,

are changed to some other service, while he, looking with triumph on the ruin he has wrought, winds his way to the far West.

But to be more serious. The expense of clearing an acre of well timbered forest land, is much greater than is commonly supposed. If any one will take the trouble to estimate it accurately, as I have done, he will find it to cost him by the time he gets his ground ready to plant, about twenty dollars per acre. This alone, it seems to me, ought to be sufficient to deter planters from adopting clearing as a system.—For I am well convinced, and I appeal with confidence to all who have fairly tried both the clearing and manuring systems, for confirmation, that a planter who has lands which were originally pretty good and not gullied, if he will keep stock enough to consume the offal of his wheat and corn crops, and haul corn-stalks, weeds and leaves or other vegetable matter to his stable-yards and cow-pens, can *manure two acres* with less expense than he can *clear one*—and further, that he can make, at the lowest estimate, twice as much tobacco on his manured acre, and get a higher price for it per hundred. These are not theoretical but practical facts. The manuring system is comparatively in its infancy, and none of us have done one-fourth of what we might and ought to do. And that man, or set of men, who, by their efforts and example, should be instrumental in breaking down the clearing system and establishing the manuring on its ruins, would deserve to be considered the greatest benefactors to the tobacco growing section of our State.

By the adoption of the manuring system our estates, instead of being constantly cut down and worn out, or (as a facetious friend of mine observed) "*Re-Pining*" under our operations, would be enhanced in value. Our principal would be rapidly increasing, while we were at the same time drawing the heavier interest.—Under this system, too, all descriptions of labor on the farm can be usefully employed. The old and the young can collect litter and spread it on the land, while only a portion can cut or maul, or hill new grounds. And lastly, the crop on old lands can be cultivated mostly with the plough, and here we have a great saving of that most expensive of all labor—hoe-labor.

With regard to the preparation of lot lands before the manure is applied, there are two modes practiced by our best planters. The one is to coultter the land close both ways, and the other to use the turning plough. The first I should consider best for high land; where there is but little vegetable matter on the surface, and especially where the soil is thin or exhausted. The last is preferable on flat lands, which should be thrown into four or eight row beds. When the manure is applied the land should be thrown into single beds three and a half feet apart.—

Where we have old lots well set in the artificial grasses, I think it a matter of great importance to fallow them in July, or when the vegetation is at its most luxuriant state. We thus secure the greatest amount of vegetable matter in the soil—it ferments and rots with greater facility and the land works easier and produces better the ensuing season. There is a difference of opinion among some judicious planters whether it is best to plant in hills or beds. On rough, stiff, or flat lands, the hill is unquestionably preferable—but on light, soft, high lands, the bed answers well and is a great saving of labor; I have tried both, and much prefer the hill if I have time to make them, inasmuch as it ensures a better preparation of the soil, and enables us to plant when it would be too wet to plant in the bed. Should the season be late and unpropitious, I would never lose the opportunity of planting by waiting to hill, if I had my lands bedded.

Passing over the time of planting, priming, topping, &c. on which our writer is sufficiently explicit, we come to the *casualties* or *diseases* to which the crop is subject. The first mentioned by our writer and by far the most serious, is the spot or firing, or more properly the rot. This is caused by too much rain, and is more liable to occur on sandy soils, and less so on those that are stiff, red, or thirsty. It is of much rarer occurrence of late years than it was formerly, which is ascribable, doubtless, to the improvements in management and cultivation which experience has suggested. The mode formerly practiced was to cultivate the crop almost level, and to keep the soil between the hills loose and well broken; under this mode of cultivation, immense losses were sustained almost yearly by fire. But by adopting just the reverse of this, by scraping up carefully with the hoe all the loose earth among the hills, as deep as the plough has gone, and throwing it on the hills, and leaving the ground among the hills as hard, if possible, as a path,—the leaves of the plant, when it is large enough to take the rot, will shield the hill from the rain, and throw the water off on the hard ground, which soon runs off, and the crop is protected. A sufficient quantity of vegetable matter turned into the soil will also do much towards preventing this disease. This is proved by the well established fact, that the first crop on a clover and herdsgrass fallow where the land is very sandy, does not fire, whereas the second or third are almost certain to do so unless some vegetable substance is turned into the soil, and hence such lands (sandy loam river or creek flats) should not be cultivated two or three years in succession, let them be ever so rich, without applying some vegetable matter or other. These are matters of the greatest importance, for there is no disease more destructive to the tobacco crop than the one we are consi-

dering, and I verily believe, if we could have cultivated our crop last year in this way, as unfavorable as the season was, we should have escaped the disaster. But the summer was so unusually wet, we were unable to cultivate our crop in our usual way, and it is the first time we have suffered with the disease. I would not be understood to say that it can always be prevented, but I do believe that it can be generally done, and in the way I have above indicated. I will only add that I very much question the propriety of ever ploughing the crop after the plants have got large enough to take the rot, on account of the loose earth that is thrown up.

Another enemy of the tobacco crop is the *culex* worm. This is not, as stated by Mr. Minor, the larvæ of the black bug, but of a fly resembling the candle fly. This fact was first established by a friend and relative of mine, Mr. Thomas F. Venable, of Prince Edward, who is an accurate observer; he imprisoned the worm in a close vessel, and fed him until he passed from the chrysalis to the fly state. But as it regards the mode of preventing or destroying them, I must request you, gentlemen, or some of your correspondents, to give us some practical information on the subject. This catching them one by one on the hill, and destroying them, is too slow and tedious and ineffectual, if we could do better. We have tried several experiments on this subject, but have not succeeded. We are now in the midst of another. We broke up our tobacco lots last summer according to custom, which were thick set in grass, we are now re-ploughing them, to see if exposure to the frosts will not interfere with the hatching out of the worm. If we succeed, I may drop you a line; till then believe me

Yours respectfully,

N. A. VENABLE.

Lunenburg County.

For the Southern Planter.

SHORT HINTS.

Stop there! that's a live tree, therefore, it should not be injured or disfigured by sticking your axe into it. And that fire too! nobody of thought would build a fire against a tree.

If you wish your son to be a successful farmer, you must cause him to understand that farming is an honorable business.

Sow your seeds in time, and take time to sow your seeds.

Boy, don't count your licks; but make each lick count for itself.

The most graceful sight in the world, is a buzzard sailing at a great elevation, but when he comes down, I grow melancholy, and begin to charge myself with some fault.

O yez; take notice! that the first bad boy I

find killing an innocent bird, or trouncing a poor frog, I will have no mercy on him.

Wickedness excepted, there is a time for all things, except one—and I would ask the lazy lubber, what is that?

ARGUS.

Amherst, March, 1843.

PEDDER'S FRANK.

From our respected friend, Mr. JAS. PEDDER, of Philadelphia, we received a few days since a bundle containing, amongst other things, a copy of FRANK, or "Dialogues between a Father and Son on the subject of Agriculture." This little work, which is dedicated particularly to the juvenile class of the agricultural community, is replete with the soundest truths of morality and agriculture. To cherish the gentler feelings of our nature, to elevate the farmer into the kind neighbor and generous friend, whilst he is instructed in the principles of his profession, is exactly the task for which Mr. Pedder's disposition and information most eminently qualify him, and in this little work, these objects have been attempted in a style and manner that do equal credit to the head and heart of the author. We should be very happy, if we could, by extending the sale of his valuable book, repay, in part, the many favors and polite attention, for which we stand indebted to Mr. Pedder.

For the Southern Planter.

TIMBER.

Messrs. Botts & Burfoot,—Although I am no theorist, I fear nevertheless, that any information at my command, derived from experience, or observation, will fail to shed much light upon the inquiries submitted by Mr. Tunstall in your last number. Still I am unwilling to withhold any facts in my possession, bearing upon the matter, to which he refers. The aim of the planter being the communication of practical knowledge, rather than the utterance of speculative opinions, I will very briefly detail some of the results of my limited experience.

About nine years since, I made an aqueduct of chestnut logs about six hundred yards in length. The logs, being about a foot in diameter and the bore about two inches, were laid down in a green state with the bark on, and from two to three feet below the surface of the ground. At this day they are in a sound state, being only a little decayed on the outside, except one of them, so far as I am aware, which was partially decayed, when put down, and which will have to be renewed. There are

about one hundred and forty of these logs. I was advised to use chesnut in preference to other timber, not only as being more lasting, when placed below the surface of the earth, but as not being liable to the obstructions, occasioned by the formation, or growth of small roots, or fibrous matter within the conduit, effectually checking the passage of water, and to which oak and pine are peculiarly liable. The year following the construction of mine, a friend also made an aqueduct of oak logs, several of which he has been compelled to take up, but for what cause I have failed to learn of him, which I now regret. Oak, too, imparts a very unpleasant taste to the water. But all this is somewhat apart from the point of Mr. T.'s inquiry. The durability of chesnut as a material for fencing-rails is universally known; and it is a fact, perhaps, not so generally known, that no timber of the valuable kinds decays with greater rapidity, when in immediate contact with the surface of the earth, where it is exposed to the combined action of the elements, as moisture, heat, &c. When chesnut is used for posts, there are only two methods, I am acquainted with, to guard against rapid decay at the part just referred to. The first is, to fill up the post-hole with stones, so that the rain-water may pass, as it falls, into the earth; and the direct contact with earth and water in a measure be avoided, and thus the action of the sun, which follows, is beneficial, instead of being injurious. This plan is suited only to high and rolling land, and not to flat and low ground, when the water must collect around the post in greater or less quantity. One fact should be specially borne in mind; no kind of timber, whether locust, walnut, chesnut or other, made into posts, ought to be set up in fence, for at least nine months after being cut. If not well seasoned, and particularly if green, the process of decay, which otherwise is scarcely perceptible, becomes very apparent in a few years. The other method, and it is the better, (though it is practicable to unite the two, but I have never seen it done,) is to cause the posts to be well charred for several inches above and below the point where they touch the surface. In hewing them, the workman should take care not to reduce them too much at this part, viz: at and below the first mortice, so that in burning, the danger of weakening the post may be avoided. In short, both oak and chesnut posts, prepared in this way, will last very many years; and all kinds should be kept from nine to twelve months before being put in the earth. Besides the kinds already mentioned, sassafras, chinkapin, white walnut as well as black, mulberry, box oak, and I believe, catalpa, (*sed quære de hoc*,) are excellent for posts; and all should be seasoned, but oak and chesnut require charring to the depth of half an inch as before remarked.

The other inquiry, as to the season of the

year in which timber should be cut, involves a mooted point and leads to some little speculation. The return of the sap into the roots in winter is a very ancient and a very common fallacy, as Mr. T. intimates. What then becomes of it? Why, if I dare utter Latin again, it is *functus officio*; or in vulgar parlance, it is *used up*. Possibly the *necessary* answer to a single question may satisfy him. How does he account for that umbrageous foliage beneath the refreshing influence of which he has so often reposed, while luxuriating in the beauties of nature, as they evolved before him in all their expansive loveliness, to the charms of which, one of his refined taste and keen sensibilities is ever alive? or whence those concentric circles, traceable by the naked eye, when the tree is sawed asunder, one of which is added every year, and denotes its age with such unerring certainty? Now I submit, with all deference, that the sap is the material of which, in part at least, the leaves and new wood are formed; in a word, the food of the plant, and to form which must require a large amount. The pores being certainly the conduits, are we to be taught to believe, that the sap is the mere agent by which the nutriment, forming the new growth, is conveyed, and that it does not enter into organic combination; whose office is analogous to the expanded leaves, which are said to act as lobes in supplying the plant with atmospheric air? But even upon this latter idea, may not the disappearance of the sap be explained upon the ground, that having performed its office, it has passed by evaporation from the body of the tree, just in the same manner as aqueous particles are passing off momentarily from the surface of the human system, when in health; except that in the former case, it is periodical; in the latter, without intermission. The other, however, seems to me to be the better opinion. For wood, as we all know, is a compound substance of which water is a component part, but in what proportion I am not chemist or botanist enough to tell. We know that the formation of the leaf and wood begins with the first signs of vegetation. When the operation ceases is a little more doubtful. The leaves are fully developed long before the arrival of summer; but the growth of the wood goes on actively to a much later period; probably to the first of August. After which, if I might hazard an opinion, timber may be cut with safety. With few exceptions, any kind may be destroyed in August, root and branch, without danger of sprouting, by simply cutting it down, which seems to show, that the sap is exhausted and all power of reproduction effectually paralyzed.

It is an express order, I believe, of the Navy Department, to have all the timber for the construction of our public vessels felled between the 20th October and the 20th of February, and for

most uses, among practical men, the period for cutting is from August to March. I presume for the reason, that the quantity of sap and moisture in the wood is so great, from March to August, that the timber, when split is very apt to spring or warp, and also to crack; both of which effects injure it. Nor is this all. Being very green and sappy, it is very difficult to rive. The process of growing imparts increased tenacity to it, owing to the formation of what laborer's call *hen's teeth* in the outer grain of the wood. Later in the season, or in winter, none of these objections occur. In speaking of 'oak,' in the preceding remarks, white oak is meant.

I am assured by observing men, that rails made from black, red, and chesnut oaks, after the bark is stripped off for the tanner, decay rapidly. Trees, the bark of which is for the use of the tanner, are always cut in this latitude in May, when the sap or juices abound; and further, that as soon as new wood, or *sap*, indurates, which is believed to be about the last of June, or first of July, the timber then cut will soon cast the bark, and the white rim, or *sap*, becomes as hard and as durable as the heart itself. After all, a series of experiments, carefully made throughout the year in different kinds of timber, can alone settle the question as to the best time for cutting it. This might easily be done, though it would require time to perfect it, as *time* is an essential ingredient in the question. Tanners must have bark; but if the opinion here indicated be correct, ought not all other descriptions to be cut, as soon as the new wood is perfectly formed, or the precise period is clearly ascertained, by cutting in May, June, July, &c. and the rails, if made into rails, kept under the eye of him making the experiment.

JAMES M'ILHANY.

Loudoun, March 3, 1843.

For the Southern Planter.

Patent Office, March 1, 1843.

Messrs. Editors,—I hasten to inclose you a small quantity of tobacco seed, with a copy of Mr. Ellicott's letter, hoping that this new experiment will prove highly useful.

Very respectfully,

H. L. ELLSWORTH.

Patuxent Iron Works, Anne Arundel Co. Md. }
February 27th, 1843. }

HON. H. L. ELLSWORTH:

Sir,—The tobacco seed you gave my brother Andrew, which you represented to be from Spain, has produced plants mostly having leaves on them fourteen inches wide, which is sufficient size for wrappers; which is not the case with Havana plants.

The tobacco appears to be of very superior quality, a sample of which I shall send you; also some of the segars as soon as I have them made up.

I send you nearly all the seed I have saved, believing tobacco from this seed will be equal to the best Havana.

Yours, with respect,

ELIAS ELLICOTT.

Two very small parcels of tobacco seed, one marked as "Ellicott's," the other as "from Consul at Trinidad," were received with the above. We keep them for Mr. N. A. VENABLE, as a small return for his valuable communications to the Planter.

THE FARM HORSE.

We have received from Mr. Cocke, who inherits a love of the horse, a request to insert an advertisement of his horse, "Black Hawk," admirably adapted, as he conceives, to the propagation of an active and powerful race of roadsters. In the veins of Black Hawk, runs the blood of the imported "Sarpedon" and Gen. Cocke's "Roebuck," whose stock for stoutness and game, upon the road, is celebrated in Virginia. We take the liberty of inviting BLACK HAWK to the exhibition of the Henrico Agricultural Society this spring. Accompanying the advertisement we received the following communication:

To the Editors of the Southern Planter:

Gentlemen,—I send the inclosed notice of my horse for publication on the cover of your paper, (with suitable figure) to appear, *if possible*, with the forthcoming number—i. e. on 1st of March, to be continued for two months thereafter.

I will state in connection with the notice of the horse, that having, in common with most Virginians, a strong love of horses, but never having indulged a taste for the sports of the turf, my partialities led me some years since to commence breeding that noble animal for the more useful purposes of the saddle and harness, with the view of ultimately propagating a distinct race of roadsters, which, like the English Hunter, should be unrivalled under the saddle and in the light draught of pleasure vehicles. My plan has been to select mares of good blood, size and useful qualities, and otherwise particularly adapted to my mode of breeding—and to put them to the largest and best of the thorough bred horses of the State, and to cross and re-cross upon this stock until animals of the desired qualities shall be produced. I have at present some twenty or more mares—colts and stallions—from which I am breeding upon the

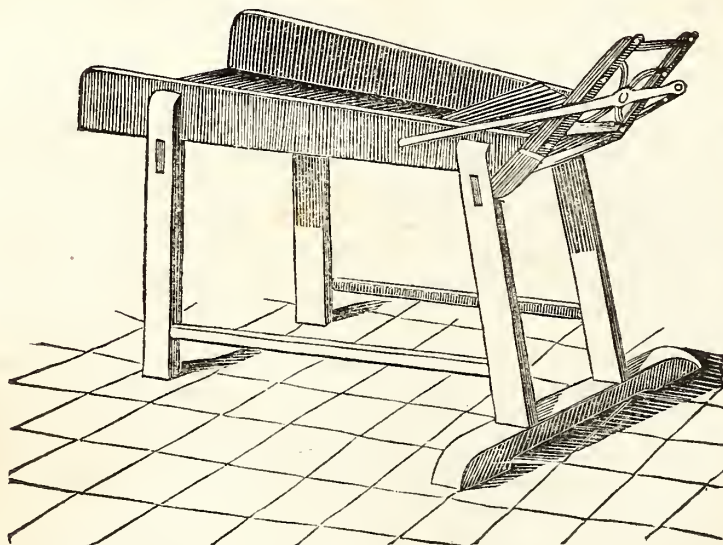
above plan. Many of the colts are very fine and remarkable for size—especially those of the second cross—and I have every indication so far of the final success of this plan of breeding, which was commenced and is prosecuted chiefly

for the gratification of a passion for fine horses, but at the same time not without the hope that it may in the end prove of some public benefit.

Very respectfully yours,

PHILIP ST. GEORGE COCKE.

STRAW CUTTER.



Experience has long since demonstrated that there was no implement upon the farm productive of greater saving than a good straw cutter. Repeated experiments made at the North and reported with the greatest accuracy, have shown a saving of one-third to the farmer who cuts up all his long feed. Impressed with the absolute necessity for one of these machines upon every well managed farm, we have paid great attention to its construction, and had some months ago brought it to such a state of perfection, as not only to entirely satisfy ourselves, but, what was much more difficult, to satisfy the numerous purchasers of the article. In this satisfaction our northern friends partook in a very large degree, as was manifested by the award to us, last fall, of the first premium of the NEW HAVEN Agricultural Society, the third premium at ALBANY, where it was broken and out of order, the first premium at Philadelphia, where it was exhibited in competition with the very implements that were preferred to it at

Albany, and again the first premium and a silver medal at the great exhibition of the AMERICAN INSTITUTE in New York, where it again met and defeated its Albany rivals and dozens of other competitors.

For this cutter, with the numerous testimonials of its durability, efficiency, and ease of management in our possession, we claim, without arrogance, the palm over every other made in Europe or America. But there is still one difficulty. To make so perfect a machine, with every facility of labor-saving machinery, with every disposition to accommodate our prices to the times, we are unable to furnish the cutter for less than *thirty dollars*, whilst we continue to make it up in a manner to sustain its well earned reputation; but we are constantly beset by small farmers, who think they cannot afford to give so much for a straw cutter, with the inquiry, "Can't you make us a cheaper cutter, which, if not so good, will yet answer our purposes?" To answer this demand, we have just

gotten up and patented an article upon an entirely new principle, which works to a miracle. It is represented in the engraving: it differs not very greatly from the usual form of guillotine straw cutter, in which a gate is made to work up and down by means of a lever, except in this, that the gate, instead of moving *perpendicularly* up and down, moves *obliquely* to the straw, so as to enter and run, as it were, with the grain of the straw. By this means, the greatest ease of cut is obtained. Let the reader go out to his wood pile, and throw his axe first perpendicularly and then obliquely into a log of wood, and he will have a pretty good idea of the advantage of this mode of cut. Again, when the gate moves perpendicularly up and down, there is a constant tendency, especially when the knife is dull, to force it off from the bed plate against which it cuts. By this means a wear and play in the gate is engendered, by which the cleanness of cut is entirely destroyed. If the gate moves obliquely the other way, that is, makes an acute, instead of an obtuse, angle with the straw, the mode in which we first tried it, this difficulty is greatly increased; but when the gate moves as in this cutter, the knife is drawn in by the grain of the straw, technically called "eating," and a constant cleanness of cut is ensured. These two advantages render this knife, which we can sell for *ten dollars*, superior, we believe, to any cheap cutter in use.

If thought desirable, a board may be set up in front at any required distance from the knife, as a gauge, against which the straw, which is fed by hand, may be pushed, so as to regulate the feed to any length required.

To grind the knife, it is only necessary to turn a single screw, when the whole gate may be slipped out, and the knife may be ground without being removed. To small farmers and private stables in cities we believe this knife will prove to be exactly what has been long wanting.

BOTTS & BURFOOT.

For the Southern Planter.

SOWING CLOVER SEED.

Messrs. Editors,—You will please to order me four barrels of poudrette; I should like to get it this month. If you have any on hand, please inform me forthwith. I wish to try experiments with it during the present season, and should it answer my expectations, I shall deal

more largely in the article in future. Your cutting box has saved me during the past winter, the price it cost me. Two hands can cut shucks, hay, or fodder enough for fifteen or twenty horses in ten or fifteen minutes with it. Your last number contains a drawing of a box for sowing clover seed, which I consider an useless piece of lumber. I follow the plan of my neighbor, Mr. Hewlett, which is to mix the quantity of clover, or any other seed, you may wish to sow to the acre with one bushel of moist (not wet) sand, and let the seedsman sow from his apron as he would wheat. It thus comes up uniformly and regularly.

Yours truly,

ROB. H. NELSON.

March 9, 1843.

For the practised and skilful sower, the plan recommended by Dr. Nelson is better than any implement that can be devised, but with any other hand, the box is invaluable in securing an even and equal distribution of the seed.

As to the CUTTER, we could add a hundred equally flattering testimonials to that of Dr. Nelson, who has been using his now for two or three years.

CREDIT QUOTATIONS.

We quoted from Tull, under the head of "Selections," in 5th number of our paper, on the subject of "Pulverising the soil." We find this same article in a December number of the *New England Farmer*, quoted from the *Southern Agriculturist*, which paper credits it to the *Southern Planter* as original. We protest against thus robbing the dead of its rightful dues.

American Agriculturist.

If the *Messrs. ALLEN* are as desirous to do justice to the living, as they are scrupulous of "robbing the dead," they will please state, that the article alluded to, was marked in the *Southern Planter* as a quotation.

For the Southern Planter.

PREMIUMS

For the next Meeting of the Agricultural Society of Henrico, which will be held the last week in May.

For the best stallion calculated to produce stock for the saddle, harness or draught, the property of the exhibitor,	\$15
For the best brood mare,	do. do. 10
For the best male saddle horse,	do. do. 10
For the best mule raised by the exhibitor,	5
For the best work horse,	do. 5

Committee of Award—Augustus Mordecai, D. W. Haxall and Poiteaux Robinson.

For the best bull, the property of the exhibitor,	\$10
For the best milch cow, do.	10
For the best milch cow, raised by the exhibitor,	10
For the best pair of oxen, property of exhibitor,	5

Committee of Award—Jacob Shook, Albert G. Hobson and Benjamin Franklin.

For the best boar, raised by exhibitor,	\$5
For the best brood sow, do.	5
For the best boar, the property of exhibitor,	5
For the best brood sow, do.	5

Committee of Award—Charles Marx, John N. Shields and L. W. Chamberlayne.

For the best buck, the property of exhibitor,	\$5
For the best lot of three ewes, do.	5

Committee of Award—Thomas S. Dicken, C. W. Gooch and William Carter.

For the best specimen of domestic wine, not less than one gallon, the production of exhibitor,	\$5
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Committee of Award—R. B. Haxall, James Lyons and William D. Wren.

For the best specimen of ploughing, to be performed by the farmer himself with his own plough and team of two horses,	\$10
To which Messrs. Botts & Burfoot add a straw cutter at \$30 and a plough at \$10,	40

Committee of Award—Hill Carter, Randolph Harrison and Richard Hill, with authority to fill vacancies.

For the best corn sheller,	Diploma.
For the best cutting machine,	Diploma.
For the best threshing machine, including horse power,	\$10

For the best specimen of farming tools, axes, hoes, spades, &c.	5
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Committee of Award—Corbin Warwick, H. L. Carter and George W. Bassett.

For the finest specimens of poultry, such as geese, ducks, turkeys, hens and chickens, a premium of \$2 50 for each specimen.

Committee of Award—Thomas B. Bigger, A. Robinson, Jr. and Edwin Hill.

Stock and articles which have heretofore received premiums are excluded from competition.

➤ There is another list of premiums to be added to the above, chiefly for horticultural products, which we could not obtain at the time of going to press.—Eds. S. P.

We have long entertained the opinion, which we have frequently expressed, that a thorough knowledge of the mechanical part of his profession, was wanting in the southern farmer.—From a long experience in mechanical business, we are peculiarly aware of the advantages possessed by any proprietor who is thoroughly in-

structed in those arts practised by his subordinates. Although it may not be necessary for the wealthy farmer to submit himself to the drudgery of manual labor, we all know how important it is that his hands should be skilled in their several occupations. Even if he has a practical overseer, it is all important that the proprietor should be able to superintend his superintendent.

The captain of a ship prides himself on being able to handle a rope better than any man aboard, and scorns to give an order that he could not execute. So a farmer, from the driving of a nail to the turning of a furrow, should have no superior; this, with his better education and higher intellect, the master, with a little practice, will soon accomplish. Impressed with these opinions, and satisfied that no better test of a good farmer can be obtained than his ability to excel in that art which lies at the foundation of good husbandry, we have put at the disposal of the Henrico Society a CUTTER and PLOUGH, to be disposed of as advertised above. We are happy to say that already some of our most respectable farmers have entered their names for the contest, which will be, we are inclined to think, one of the most animating and interesting that has ever been witnessed in this country. One gentleman, a distinguished *writer* and a *celebrated* farmer, says he would enter, if the time of trial could be postponed, so that he might *learn to plough*.

TOMATOES FOR COWS.

It is not generally known (says the L. C. Advocate) that this vegetable is a superior article of food for milch cows. We have tried it two summers, and it is decidedly superior to any other vegetable we have yet tried. They add greatly to the quantity as well as to the richness of the milk, and give a rich golden color to the cream and butter, which is at least pleasant to the eye, even if the flavor is not so improved. We do not know, however, that they impart any richer flavor to the butter.

We have known a cow to refuse them when first offered, but soon became very fond of them; others, we believe a large majority, eat them greedily from the first. Thus far we have fed them only in the raw state; but if boiled with corn meal, say half and half, or two-thirds tomatoes, they will doubtless be far better.

To one who has a dairy farm, the cultivation of an acre or two in tomatoes would be repaid by greater profit than any vegetable we know. From one acre not less than eight bushels may

be gathered daily from July until frost. There is some trouble in picking them, but then nearly every farmer has children; his little boys—ay, and his big ones, too—would not be the worse for a little work. We should be glad to see the experiment tried on a larger scale than ours, and to learn the result.

SWEET POTATOES.

We observe that a correspondent of the "S. Western Farmer," in Mississippi, declares, that from a thorough trial he is fully satisfied that sweet potatoes, as a food for stock, are far superior to ruta бага, and that he believes they as far excel the sugar beet. Our early subscribers will remember that a northern emigrant declared, in the first volume of the Planter, that if the northern people could raise the sweet potato, they would abandon all other roots.

TO PRESERVE FLOWERS FRESH FOR A LONG PERIOD.

Procure a flat dish of porcelain; into which pour water sufficient to nearly fill it; in the water place a vase of flowers: over the vase place a bell-glass, with its rim in the water. This is similar to a "Wards's case," in principle, although different in construction. The air that surrounds the flowers being confined beneath the bell-glass, is constantly moist with the water that rises into it, in the form of vapor. As fast as the water becomes condensed, it runs down the sides of the bell-glass into the dish; and if means be taken to enclose the water on the *outside* of the bell-glass, so as to prevent its evaporating into the air of the sitting room, the atmosphere around the flowers will remain continually damp. This plan is designated the "Hopean apparatus." The experiment may be tried on a small scale, by inserting a tumbler over a rose bud, in a saucer of water.

Gardeners' Chronicle.

TOBACCO.

We were struck with the views of a distinguished planter of Cumberland, who was speaking to us a few days since upon the subject of the tobacco crop. He thinks, under the system that is now prevailing, it is destined to be the great renovator of our worn out lands, and that it will yet accomplish for Virginia what turnips have effected for the county of Norfolk, and British husbandry in general. He contends that it is not an exhauster, but that, being like the turnip a broad leaved plant, and

being removed before it matures its seed, it draws its sustenance, in a great measure, from the atmosphere, and is, according to all established principles, an ameliorating crop. That the lands of our planters have grown poor, he thinks, proceeded from other causes than the abstract cultivation of tobacco. In the first place, our ancestors were too prodigal of the gifts of nature, and the treasures of the barn-yard were too long permitted to waste their sweetness upon the desert air. Secondly, when their successors were driven by necessity to the collection and use of manure, the tobacco planters concentrated all of theirs upon their tobacco lots, which, on account of their superiority, were immoveably devoted to this valuable staple, and that so far from the tobacco having exhausted, it is a notorious fact that the best part of every plantation is that which has been devoted to its growth. It is in fact the corn and oats, cultivated by this system without manure, that have exhausted the land. But, says our author, there is no crop, not even the turnip itself, that from the saving of manure that it induces, and the high degree of tillage it requires, forms as good a preparation for succeeding crops; and all that is wanting, as he contends, to demonstrate its value, is the new system, which makes every portion of the farm that is to be improved a tobacco lot, alternately; thus making a rotation, of which tobacco shall form a constituent part.

From the Connecticut Farmers' Gazette.

FOR CORN—A RECIPE.

Mix plaster, unleached ashes, and quick fine lime together, in the following proportions:—two parts plaster, two parts ashes, and one part lime, and apply a small quantity of the mixture to each hill of corn immediately after the first hoeing, and see if it don't go a "leettle" ahead of any thing you ever tried to make corn grow.—Be sure to leave one row without the application, "jest" to see the difference.

NOVICE.

THE SPIRIT OF THE TIMES.

This valuable hebdomadal has come to us this week accompanied by a spirited and faithful portrait of W. R. Johnson, Esq., which in after days will be worth a year's subscription to the paper. In this age of cheap literature, the Spirit of the Times stands "solitary and alone," a monument of what an Editor can afford to do

when he is liberally remunerated by his subscribers. The diversified character of this paper and the ability with which it is conducted, render it acceptable to all amusement-seeking classes of the community; the literary selections are made with great taste, and in some of the flash epistles of the sporting department, we have met with veins of humor as rich and genuine as are to be found in any cotemporary in the Union. High as the price is, we will venture to say, that the subscribers to this paper get more for their money than many, who think economy requires them to limit their patronage to a cheaper(?) work.

TO STOP A FIT OF COUGHING.

A correspondent of the London Medical Gazette, states that to close the nostrils with the thumb and finger during expiration, leaving them free during inspiration will relieve a fit of coughing in a short time.

In addition to the above we can state from personal knowledge that to press the finger on the upper lip just below the nose will make the severest premonitory symptoms of a sneeze pass off harmless. We have found the remedy useful many a time in creeping on game in the woods.

The following prescription may be relied upon. It comes from a source entitled to the highest respect. The old gentleman, who furnished it, says that he has known it cure travelling horses in a few minutes so that they were able, in half an hour, to resume their journeys and perform as well as ever:

"Infallible Cure for a Foundered Horse.—If your horse founders over night, in the morning take a pint of hog's lard, put it in a vessel and make it boiling hot, clean his hoofs well, set his foot in the lard. Heat it for each foot, boiling hot; take a spoon and put the fat over the hoof as near the hair as possible, and he will be fit for use in three hours if it is done early in the morning. It is better to remove the horse's shoes, but I have made several cures without. I have tried this on many horses during a period of fifty years, and have never known it to fail."

Louisville Journal.

EDITORIAL.

OUR SUBSCRIBERS.

A few of our subscribers are still delinquent, and two or three still owe us for last year.—About the 15th of April we shall make out bills,

after which their doom to the payment of \$1 50 will be irrevocable.

TO CORRESPONDENTS.

We have received and were desirous of publishing in this number a communication from BANNISTER, and sent it to the printer for the purpose, but he has just returned it, saying, they had no key in the office to "Bannister's" hieroglyphics. There are two or three lines that stump us, but we will try and copy it for the next number.

CONTENTS OF NO. IV.

- Artichoke*—Value of Jerusalem, and directions for its cultivation, p. 73.
Charcoal—Its value for agricultural purposes, p. 74.
Blue Grass—Its value, with the mode of management, p. 74.
Lice—To free cattle from, p. 75.
Corn—Advantage of cultivating double eared stalks, p. 75.
Wheat—Experiments upon the proper time of cutting, p. 76.
Coal Tar—How to use on roofs, p. 76.
Asparagus—New method of growing, p. 77.
Sweet Potatoes—Information asked, p. 77.
Corn—Result of an experiment broadcast, p. 77.
Grubbing—A grab and a grubbing hook described, with a cut, p. 78.
Cucumbers—To obtain early, p. 78.
Tomatoes—To obtain early, p. 78.
Potatoes—To obtain early, p. 78.
Lettuce—To obtain early, p. 79.
King William Agricultural Society—Report of various experiments made by the members, p. 79.
Locust—The value of the timber, with directions for the cultivation of the tree, p. 80.
Charcoal—Directions for burning, p. 80.
Tools—Directions for tempering, p. 81.
Agriculture of Virginia—A letter from J. M. Garnett, Esq. in answer to "Vindicator," p. 81.
Ditching—Directions for making, p. 83.
Piny Old Fields—Directions for improving, p. 84.
Gate—Plan for steadying the post, illustrated with a cut, p. 84.
Dynamometer—Description of Mr. Cone's, p. 85.
A Table—Showing the number of hills in an acre at different distances, p. 85.
Fencing—A new plan of, p. 85.
Tobacco—A review of Mr. Minor's pamphlet, No. 2, p. 87.
Short Hints—By Argus, p. 89.
Pedder's Frank—Notice of, p. 89.
Timber—Essay on, p. 89.
Tobacco—Seed received from Patent Office, p. 91.
Straw Cutter—New plan, with a cut, p. 92.
Clover Seed—How to sow, p. 93.
Henrico Agricultural Society—Premiums offered for spring meeting, p. 93.
Tomatoes—Good food for cows, p. 94.
Sweet Potatoes—Value of as food for stock, p. 95.
Flowers—To preserve, p. 95.
Tobacco—An improver, p. 95.
Seed Corn—Directions for preparation of, p. 95.
Spirit of the Times—Notice of, p. 95.
Coughing—To stop, p. 96.
Founder—Cure for, p. 96.